

Sequence Listing

SEQ ID NO: 1: SAP amino acid sequence

AGKTFPDVPADHWGID

SINYLVEKGAVKGN

KGMFEPGKELTRAEA

ATMMAQILNLPIDKD

AKPSFADSQGQWYTP

FIAAVEKAGVIKGTG

NGFEPNGKIDRV SMA

SLLVEAYKLDTKVNG

TPATKFKDLETLNWG

KEKANILVELGISVG

TGDQWEPKKTVTKAE

AAQFIAKTDKQFGTE

AAKVESAKAVTTQKV

EVKFSKAVEKLTKE

IKVTNKANNDKVLVK

EVTLSSEDKRSATVEL

YSNLA AKQTYTVDVN

KVGKTEVA VGSLEAK

TIEMADQTVVADEPT

ALQFTVKDENGTEVV

SPEGIEFVTPAAEKI

NAKGEITLAKGTSTT

VKAVYKKD GKVV AES

KEVKVSAEGAAVASI

SNWTVAEQNKADFTS

KDFKQNNKVYEGDNA

YVQVELKDQFNAVTT

GKVEYESLNTEVAVV
DKATGKVTVLSAGKA
PVKVTVKDSKGKALV
SHTVEIEAFAQKAMK
DIKLEKTNVALSTKD
VTDLKVKAPVLDQYG
KEFTAPVTVKVLDKD
GKELKEQKLEAKYVN
RELVLNAAGQEAGNY
TVVLTAKSGEKEAKA
TLALELKAPGAFSKF
EVRGLDTELDKYVTE
ENQKNAMTVSVLPVD
ANGLVLKGAEAAELK
VTTTNKEGKEVDATD
AQVTVQNNSVITVGQ
GAKAGETYKVTVVLD
GKLITTHSFKVVDTA
PTAKGLAVEFTSTSL
KEVAPNADLKAALLN
ILSVDGVPATTAKAT
ASNVEFVSADTNVVA
ENGTVGAKGATSIYV
KNLTVVKDGKEQKVE
FDKAVQVAVSIKEAK
PATK

SEQ ID NO: 2 SAP nucleotide sequence

AAAACATTCCCAGACGTTCTGCTGATCACTG
GGGAATTGATTCCATTA ACTACTTAGTAGAAAAAGGCGCAGTTAAAGGTA
ACGACAAAGGAATGTTTCGAGCCTGGAAAAGAATTA ACTCGTGCAGAAGCA
GCTACAATGATGGCTCAAATCTTAACTTACCAATCGATAAAGATGCTAA
ACCATCTTTCGCTGACTCTCAAGGCCAATGGTACACTCCATTCATCGCAG
CTGTAGAAAAAGCTGGCGTTATTAAAGGTACAGGAAACGGCTTTGAGCCA
AACGGAAAAATCGACCGCGTTTCTATGGCATCTCTTCTTGTAGAAGCTTA
CAAATTAGATACTAAAGTAAACGGTACTCCAGCAACTAAATTCAAAGATT
TAGAAACATTAACTGGGGTAAAGAAAAAGCTAACATCTTAGTTGAATTA
GGAATCTCTGTTGGTACTGGTGATCAATGGGAGCCTAAGAAAACTGTAAC
TAAAGCAGAAGCTGCTCAATTCATTGCTAAGACTGACAAGCAGTTCGGTA
CAGAAGCAGCAAAAGTTGAATCTGCAAAAGCTGTTACA ACTCAAAAAGTA
GAAGTTAAATTCAGCAAAAGCTGTTGAAAAATTA ACTAAAGAAGATATCAA
AGTAACTAACAAAGCTAACACGATAAAGTACTAGTTAAAGAGGTA ACTT
TATCAGAAGATAAAAGATCTGCTACAGTTGAATTATATAGTAACTTAGCA
GCTAAACAACTTACACTGTAGATGTAAACAAAGTTGGTAAACAGAAAGT
AGCTGTAGGTTCTTTAGAAAGCAAAAACAATCGAAATGGCTGACCAAAACAG
TTGTAGCTGATGAGCCAACAGCATTACAATTCACAGTTAAAGATGAAAAC
GGTACTGAAGTTGTTTCACCAGAGGGTATTGAATTTGTAACGCCAGCTGC
AGAAAAAATTAATGCAAAAGGTGAAATCACTTTAGCAAAAGGTACTTCAA
CTACTGTAAAAGCTGTTTATAAAAAAGACGGTAAAGTAGTAGCTGAAAGT
AAAGAAGTAAAAGTTTCTGCTGAAGGTGCTGCAGTAGCTTCAATCTCTAA
CTGGACAGTTGCAGAACAAAATAAAGCTGACTTTACTTCTAAAGATTTC
AACAAAACAATAAAGTTTACGAAGGCGACAACGCTTACGTTCAAGTAGAA
TTGAAAGATCAATTTAACGCAGTAACA ACTGGAAAAGTTGAATATGAGTC
GTTAAACACAGAAGTTGCTGTAGTAGATAAAGCTACTGGTAAAGTAACTG
TATTATCTGCAGGAAAAGCACCAGTAAAAGTAACTGTAAAAGATTCAAAA
GGTAAAGCACTTGTTTCACACACAGTTGAAATTGAAGCTTTCGCTCAAAA
AGCAATGAAAGACATTAAATTAGAAAAAACTAACGTAGCGCTTTCTACAA
AAGATGTAAACAGATTTAAAAGTAAAAGCTCCAGTACTAGATCAATACGGT
AAAGAGTTTACAGCTCCTGTAAACAGTGAAAGTACTTGATAAAGATGGTAA
AGAATTAAGAACAACAAAATTAGAAAGCTAAATATGTGAACAGAGAATTAG
TTCTGAATGCAGCAGGTCAAGAAGCTGGTAATTATACAGTTGTATTA ACT
GCAAAATCTGGTGAAAAAGAAGCAAAAGCTACATTAGCTCTAGAATTAAA
AGCTCCAGGTGCATTCTCTAAATTTGAAGTTCGTGGTTTAGACACAGAAT
TAGATAAATATGTTACTGAGGAAAACCAAAAGAATGCAATGACTGTTTCA
GTTCTTCCTGTAGATGCAAAATGGATTAGTATTA AAAAGGTGCAGAAGCAGC
TGA ACTAAAAGTAACAACAACAACAAAGAAGGTAAAGAAGTAGACGCAA
CTGATGCACAAGTTACTGTACAAAATAACAGTGTAATTACTGTTGGTCAA
GGTGCAAAAGCTGGTGAGACTTATAAAGTAACAGTTGTACTAGATGGTAA
ATTAATCACA ACTCATTCAATTCAAAGTTGTTGATACAGCACCAACTGCTA
AAGGATTAGCAGTAGAATTTACAAGCACATCTCTTAAAGAAGTAGCTCCA
AATGCTGATTTAAAAGCTGCACTTTTAAATATCTTATCTGTTGATGGTGT
ACCTGCGACTACAGCAAAAGCAACAGCTTCTAATGTAGAATTTGTTTCTG
CTGACACAAATGTTGTAGCTGAAAATGGTACAGTTGGTGCAAAAGGTGCA
ACATCTATCTATGTGAAAAACCTGACAGTTGTAAAAGATGGAAAAGAGCA
AAAAGTAGAATTTGATAAAGCTGTACAAGTTGCAGTTTCTATTAAAGAAG

CAAAACCTGCAACAAAACATCACCATCACCATCACTAA

CGTGGG